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EXAMINER

WASSUM, LUKE S

ART UNIT PAPER NUMBER

2177

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/713,432

Applicant(s)

KILLIAN ET AL.

Examiner

Luke S. Wassum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 December 2003 has been entered.

Response to Preliminary Amendment

2. A preliminary amendment, filed 19 December 2003, has been received, entered into the record and considered.

3. As a result of the amendment, claims 1 and 6 have been amended. Claims 11-15, 20 and 21 have been previously canceled. Claims 1-10 and 16-19 remain pending in the application.

Priority

4. The applicants' claim to domestic priority under 35 U.S.C. § 119(e) based on provisional application 60/172,304, filed 16 December 1999, is acknowledged.

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The Invention

5. The claimed invention is a method of customizing television content based on a user profile, and integrating a preferred display component (such as Intercast, closed-captioning or Teletext, as disclosed by the specification) with a decoded television signal.

Drawings

6. The drawings are objected to because in Figure 2, the label for item 48 is misspelled as "Display *Compenents* Database". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1, 2, 5, 6, 8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sezan et al.** (U.S. Patent 6,236,395) in view of **Banker et al.** (U.S. Patent 5,485,221).

11. Regarding claim 1, **Sezan et al.** teaches an apparatus for customizing television content operable to run on a computing platform electrically coupled to a receiver which is electrically coupled to a display device, the apparatus operable to receive supplemental data from a supplemental data database maintained by a television service provider as claimed, the apparatus comprising:

- a) a television tuner/decoder operable to receive television signals from the television service provider and decode the received television signal (see col. 2, line 65 through col. 3, line 16; see also col. 4, lines 3-11; see also col. 7, lines 50-63);
- b) a profile database operable to store a viewer profile (see disclosure of the user description scheme, analogous to the claimed profile database, at col. 5, line 36 through col. 6, line 22); and

- c) a filter module disposed proximate to the display device and remote from the television service provider, said filter module electrically coupled to said profile database, said filter module operable to access the viewer profile and in response, to select a preferred display component according to the viewer profile, the preferred display component operable to target a particular viewer relative to other viewers (see col. 3, lines 48-59; see also col. 9, lines 48-52; see also col. 10, lines 31-37).

Besides simply using the profile database to provide customized program content, **Sezan et al.** also teaches the use of the user description scheme (analogous to the claimed profile database) to customize device settings, such as display brightness, contrast and volume (see col. 11, lines 6-22; see also col. 23, lines 1-7).

Sezan et al. does not explicitly teach an apparatus for customizing television content further comprising a supplemental data extractor operable to receive supplemental data from the television signal provider, and an overlay coupled to said television tuner/decoder to receive the decoded television signal and to said filter module to receive the preferred display component, said overlay operable to integrate said decoded television signal and said preferred display component for combining display via a display device.

Banker et al., however, teaches an apparatus for customizing television content further comprising a supplemental data extractor operable to receive supplemental data from the television signal provider (see col. 3, lines 30-47), and an overlay disposed proximate to the display device and remote from the television service provider, said overlay coupled to said television tuner/decoder to

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receive the decoded television signal and to said filter module to receive the preferred display component, said overlay operable to integrate said decoded television signal and said preferred display component for combining display via a display device (see col. 3, lines 30-47 and lines 57-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are both of the same field of endeavor, that is, the delivery of desired multimedia content to a subscriber television from a multimedia data repository (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to modify the system of **Sezan et al.** to provide the ability to integrate content from multiple media sources, since this would enable the display of multiple services of text and video simultaneously without requiring an additional tuner and without occupying more than a single band of the broadband television signal, as well as enabling several different virtual channels to be defined from the composite video signal, which has the advantage of providing the subscriber numerous different services without a corresponding increase in bandwidth (see **Banker et al.**, col. 5, lines 1-9).

12. Regarding claim 6, **Sezan et al.** teaches a method performed on a computing platform that is associated with a display device and a receiver for providing functionality associated with an apparatus for customizing television content as claimed, the method comprising:

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- a) storing a viewer profile in a profile database (see disclosure of the user description scheme, analogous to the claimed profile database, at col. 5, line 36 through col. 6, line 22);
- b) receiving a television signal from the television signal provider (see col. 2, line 65 through col. 3, line 16; see also col. 4, lines 3-11; see also col. 7, lines 50-63);
- c) accessing the viewer profile in the profile database (see disclosure of the user description scheme, analogous to the claimed profile database, at col. 5, line 36 through col. 6, line 22); and
- d) selecting at a location proximate to the display device and remote from the television service provider a preferred display component according to the viewer profile, the preferred display component operable to target a particular viewer relative to other viewers (see col. 3, lines 48-59; see also col. 9, lines 48-52; see also col. 10, lines 31-37).

Besides simply using the profile database to provide customized program content, **Sezan et al.** also teaches the use of the user description scheme (analogous to the claimed profile database) to customize device settings, such as display brightness, contrast and volume (see col. 11, lines 6-22; see also col. 23, lines 1-7).

Sezan et al. does not explicitly teach a method for customizing television content further comprising receiving supplemental data from a display component database, and integrating the received television signal and said preferred display component for combining display to a viewer.

Banker et al., however, teaches a method for customizing television content further comprising receiving supplemental data from a display component database (see col. 3, lines 30-47), and integrating at a location proximate to the display device and remote from the television service center the received television signal and said preferred display component for combining display to a viewer (see col. 3, lines 30-47 and lines 57-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are both of the same field of endeavor, that is, the delivery of desired multimedia content to a subscriber television from a multimedia data repository (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to modify the system of **Sezan et al.** to provide the ability to integrate content from multiple media sources, since this would enable the display of multiple services of text and video simultaneously without requiring an additional tuner and without occupying more than a single band of the broadband television signal, as well as enabling several different virtual channels to be defined from the composite video signal, which has the advantage of providing the subscriber numerous different services without a corresponding increase in bandwidth (see **Banker et al.**, col. 5, lines 1-9).

13. Regarding claims 2 and 8, **Sezan et al.** additionally teaches an apparatus and method for customizing television content, further comprising a profile module for receiving viewer demographic information (see disclosure that the user description scheme, analogous to the claimed viewer profile, can be generated and updated by direct user input, col. 11, lines 43-47), and

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generating the viewer profile according to the viewer demographic information (see col. 11, lines 43-47).

14. Regarding claim 5, **Sezan et al.** additionally teaches an apparatus for customizing television content, wherein the filter module comprises a selection algorithm operable to select a preferred display component according to the viewer profile and the supplemental data (see col. 3, lines 48-59; see also col. 9, lines 48-52; see also col. 10, lines 31-37; see also description of the search, filtering and browsing (SFB) module, col. 9, lines 9-26).

15. Regarding claims 16 and 18, **Banker et al.** additionally teaches a method and apparatus for customizing television content wherein the decoded television signal is displayed in a first display area and the preferred display component is displayed in a second display area (see col. 4, lines 23-32; see also col. 15, line 54 through col. 16, line 16; see also Figures 4A, 4B and 4C).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display the decoded television signal in a first display area and the preferred display component in a second display area, since this allows the display of two or more distinct multi-service virtual channels from a single channel of broadband television signal (see col. 4, lines 29-32).

16. Regarding claims 17 and 19, **Banker et al.** additionally teaches a method and apparatus for customizing television content wherein said supplemental data is extracted from said decoded television signal (see col. 4, lines 57-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to extract said supplemental data from said decoded television signal, since this allows the user to display a combination of video and text services simultaneously (see col. 3, lines 48-52).

17. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sezan et al.** (U.S. Patent 6,236,395) in view of **Banker et al.** (U.S. Patent 5,485,221) as applied to claims 1, 2, 5, 6, 8, 11, 12 and 16-21 above, and further in view of **Goldberg et al.** (U.S. Patent 5,823,879).

18. Regarding claims 3 and 9, **Sezan et al.** and **Banker et al.** teach a method and apparatus for customizing television content substantially as claimed.

Neither **Sezan et al.** nor **Banker et al.** teach a method and apparatus for customizing television content wherein said profile module is operable a demographic template to the viewer for receiving the viewer demographic information.

Goldberg et al., however, teaches a method and apparatus for customizing television content wherein said profile module is operable a demographic template to the viewer for receiving the viewer demographic information (see col. 25, lines 4-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are concerned with the same field of endeavor, that is, targeting content based on demographic content (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract; see also **Goldberg et al.**, col. 21, lines 36-41).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to use a template to input viewer demographic data, since templates are efficient mechanisms for allowing the manual input of data.

19. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sezan et al.** (U.S. Patent 6,236,395) in view of **Banker et al.** (U.S. Patent 5,485,221) as applied to claims 1, 2, 5, 6, 8, 11, 12 and 16-21 above, and further in view of **Goldberg et al.** (U.S. Patent 5,823,879) in view of **Dedrick** (U.S. Patent 5,717,923).

20. Regarding claims 4 and 10, **Sezan et al.** and **Banker et al.** teach a method and apparatus for customizing television content substantially as claimed, including a teaching that the viewer profile contains demographic categories including age and gender (see col. 24, lines 1-10).

Neither **Sezan et al.** nor **Banker et al.** explicitly teach a method and apparatus wherein the demographic categories include marital status, education level, nor income level.

Goldberg et al., however, teaches a method and apparatus wherein the demographic categories include marital status, education level, and income level (see col. 21, line 63 through col. 22, line 15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are concerned with the same field of endeavor, that is, targeting

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content based on demographic content (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract; see also **Goldberg et al.**, col. 21, lines 36-41).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to include the claimed demographic categories, since this would allow advertisers to effectively target their advertising to those customers that would be more likely to be receptive to the advertisement (see **Goldberg et al.**, col. 4, lines 9-31), thus increasing the cost effectiveness of his advertising dollars.

None of **Sezan et al.**, **Banker et al.** nor **Goldberg et al.** explicitly teaches a method and apparatus wherein the demographic categories include race and sexual preference.

Dedrick, however, teaches a method and apparatus wherein the demographic categories include race (see disclosure of the use of demographics including vital statistics, col. 3, lines 44-46) and sexual preference (see disclosure of the use of demographics including psychographic information comprising lifestyle and behavioral characteristics, col. 3, lines 46-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are concerned with the same field of endeavor, that is, targeting content based on demographic content (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract; see also **Goldberg et al.**, col. 21, lines 36-41; see also **Dedrick**, Abstract).

It would have been further obvious to one of ordinary skill in the art at the time of the invention to include the claimed demographic categories, since this would allow advertisers to

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effectively target advertisements to users that are more likely to respond to said advertisements (see **Dedrick**, col. 16, lines 6-22), thus increasing the cost effectiveness of his advertising dollars.

21. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sezan et al.** (U.S. Patent 6,236,395) in view of **Banker et al.** (U.S. Patent 5,485,221) as applied to claims 1, 2, 5, 6, 8 and 16-19 above, and further in view of **Herz et al.**[1] (U.S. Patent 5,758,257).

22. Regarding claim 7, **Sezan et al.** and **Banker et al.** teach a method for customizing television content substantially as claimed.

Neither **Sezan et al.** nor **Banker et al.** explicitly teach a method for customizing television content wherein said step of selecting a preferred display component includes the automatic selection of a preferred display component based on an analysis of the viewer profile and received abbreviated reference.

Herz et al.[1], however, teaches a method for customizing television content wherein said step of selecting a preferred display component in accordance with the viewer profile and supplemental data includes:

- a) transmitting an abbreviated reference associated with a specific display component to the viewer from the television service provider (see description of the content profile, analogous to the claimed abbreviated reference, col. 11, lines 30-58; see also disclosure that the content profiles are periodically downloaded as part of the electronic program guide, col. 24, line 66 through col. 25, line 2);

- b) automatically selecting an abbreviated reference via the computing platform at a viewer location in accordance with the viewer profile (see extensive discussion of the calculation of an agreement matrix between the content profile/abbreviated reference and the customer profile/viewer profile, col. 19, line 5 through col. 22, line 6);
- c) requesting at the viewer location a preferred display component associated with the abbreviated reference from the television service provider (see disclosure that preferred video programming is scheduled for transmission from the head end from the available video programming, col. 25, lines 19-30 and 49-53; see also col. 6, lines 14-35); and
- d) transmitting the preferred display component from the television service provider to the viewer location (see disclosure that preferred video programming is scheduled for transmission from the head end from the available video programming, col. 25, lines 19-30 and 49-53; see also col. 6, lines 14-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references, since they are all concerned with the same field of endeavor, that is, the delivery of desired multimedia content to a subscriber television from a multimedia data repository (see **Sezan et al.**, Abstract; see also **Banker et al.**, Abstract; see also **Herz et al.**[1], Abstract).

It would have been furthermore obvious to one of ordinary skill in the art at the time of the invention to incorporate the automatic selection and delivery of content that matches the viewer profile, since this would preclude the need for the user to actively select the desired programming (see **Herz et al.**[1], col. 2, lines 13-18), thus providing the advantage of presenting programming

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content that is of interest to the user without requiring him to peruse possible programming choices and selecting between them.

Response to Arguments

23. Applicant's arguments filed 19 December 2003 have been fully considered but they are not persuasive.

24. Regarding the Applicants' argument that the cited prior art fails to teach the claimed elements of supplemental content being selected for display based on user profile data, the examiner responds that the **Sezan et al.** reference teaches the recording and presentation of information to a user based on their profile data, and in particular their prior viewing and listening habits, preferences, and personal characteristics. This is taught at col. 3, lines 20-24 and 54-60 et seq.

25. Regarding the Applicants' argument that the filter module and the overlay are not "at a location proximate to the display device and remote from the television service provider", the examiner responds that the **Sezan et al.** reference teaches the fact that the filter module is at the display device, at col. 3, lines 48-59; see also col. 9, lines 48-52; see also col. 10, lines 31-37; see also Search and Filtering and Browsing Module 52 within AudioVisual System 16 in Figure 2.

Furthermore, **Banker et al.** teaches the claimed overlay that is at the display device. For instance, at col. 3, line 53 through col. 4, line 3, it is taught that the headend transmits a broadband television signal having multiple channels comprising a composite video signal which is the combination of several video signals (see col. 3, lines 53-59). Also transmitted is additional information, for example, text data streams (see col. 4, lines 1-3).

Banker et al. further teaches that on the receiver end, a selector selects a virtual channel and a tuner tunes to the channel of the broadband video signal that the composite video signal occupies (see col. 4, lines 52-55). Finally, the text data stream corresponding to the selected virtual channel can be extracted from the input signal (see col. 4, lines 57-59) and then supplied to the on-screen display control, along with the selected composite video signal, to produce a video output display signal (sol. 4, lines 59-62).

This teaches that the overlay integrates the decoded television signal and the preferred display component for combined display, and that this occurs proximate to the display device, as claimed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke S. Wassum whose telephone number is 703-305-5706. The examiner can normally be reached on Monday-Friday 8:30-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

In addition, INFORMAL or DRAFT communications may be faxed directly to the examiner at 703-746-5658.

Customer Service for Tech Center 2100 can be reached during regular business hours at (703) 306-5631, or fax (703) 746-7240.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Luke S. Wassum
Art Unit 2177

lsw
3 February 2004